Service Manual

NATIONAL
TAPE RECORDER
PANASONIC

CASSETTE TAPE RECORDER WITH 3-BAND MW/SW1/SW2 RADIO

RQ-224MECHANISM SERIES

MODEL RQ-434DS

SPECIFICATIONS

Power Source:	AC: 90~109, 110~125, 200~219, 220~250 volts; 50/60 Hz DC: 9 volts (six "C" type batteries); Car/boat battery (using optional car/boat adaptor RP-916)
Power Consumption:	6 W
Motor:	Mechanical governor motor
Transistors:	2SB173(1) 2SB175(3) 2SB324(2) 2SB172(1) 2SC920(4)
Diodes:	OA70 or 90 (1) FR2 or SD1 (2) OA90 or SD46(2) RD6A(1) EYV320D1R2JA(1)
Maximum Output:	1.5 W (RMS)
Track System:	2-track monaural
Recording System:	AC bias 35 kHz
Erasing System:	DC erase
Tape Speed:	1-7/8 ips.
Fast Forward Time:	Approx. 110 seconds with C-60 cassette
Rewind Time:	Approx. 110 seconds with C-60 cassette.
Frequency Response:	50~10,000 Hz
Inputs:	"MIC" −68 dB 2.7 kΩ "AUX IN" −23 dB 100 kΩ
Outputs:	"EXT SP" 8Ω
Recording time:	One hour (two-way using C-60 tape)
Speaker:	3-5/8" PM dynamic spaker
Dimensions:	11-7/8"(W) × 10-1/4"(H) × 3-3/8"(D)
Weight:	6 lbs.

RADIO SECTION

Frequency Range:	MW: 525~1,605 kHz SW1: 2.3~7 MHz SW2: 7~22 MHz
Sensitivity:	MW: 100μV/m/50 mW SW1: 70μV/50 mW SW2: 70μV/5 mW

These specifications are subject to change in order to accommodate improvements in design.

MATSUSHITA ELECTRIC
MATSUSHITA ELECTRIC TRADING CO., LTD.
P. O. Box 288 Central, Osaka, Japan

ORDER NO. ARD-7201023

LOCATION OF PARTS

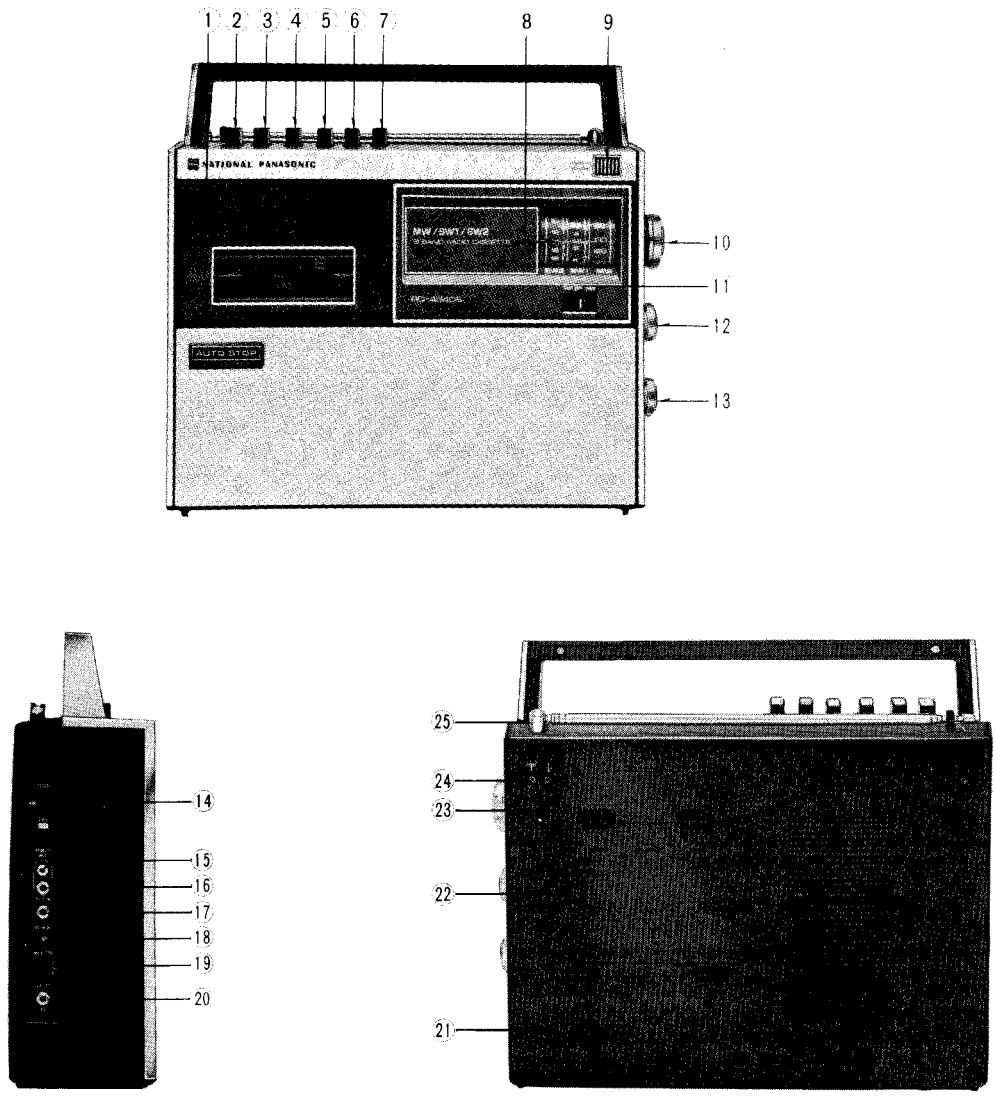


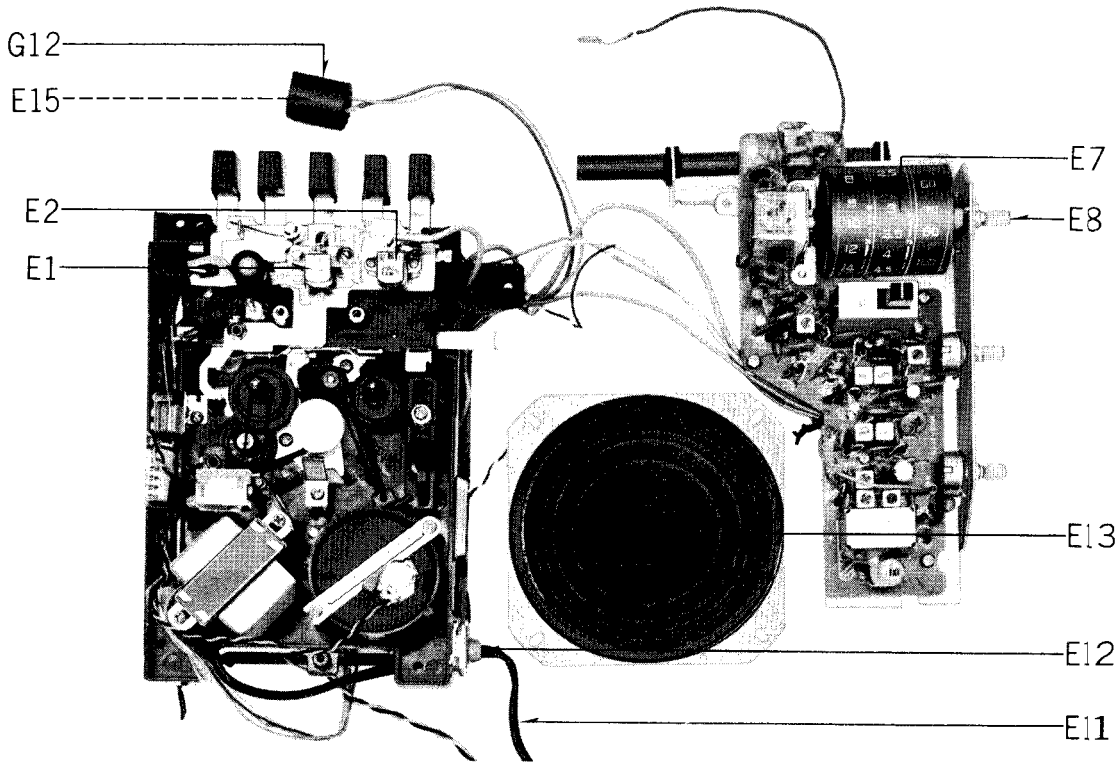
Fig. 1

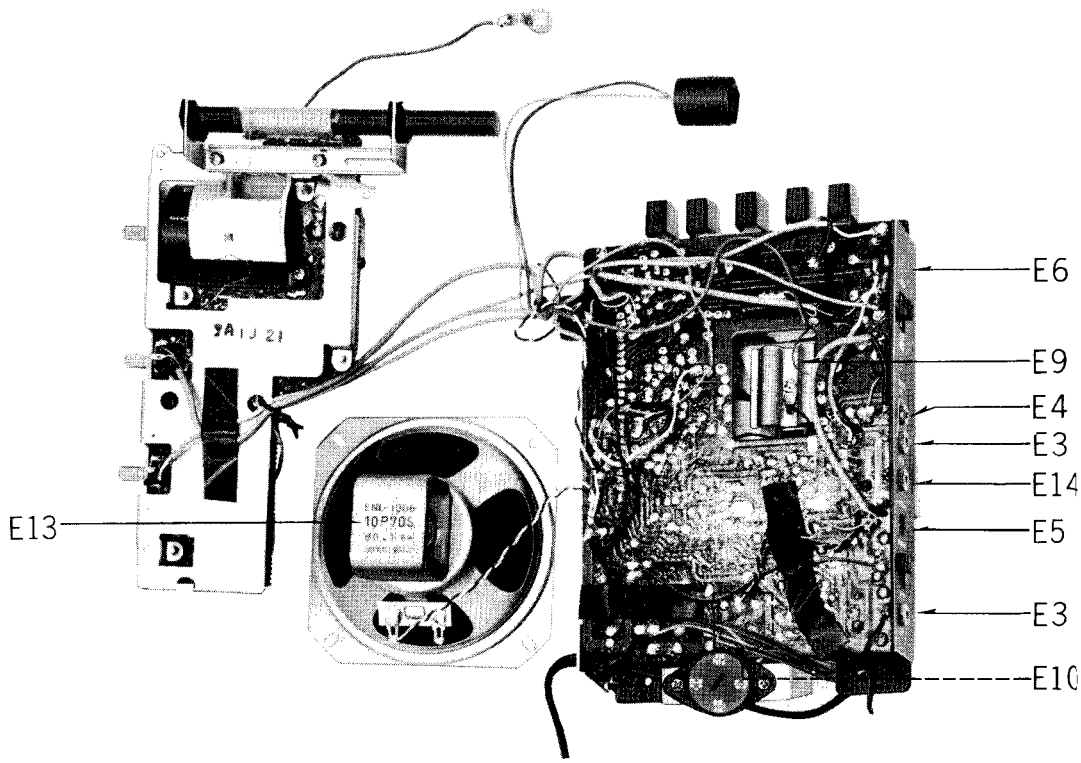
① Cassette compartment cover
② Fast forward button
③ Stop button
④ Playback button
⑤ Rewind button
⑥ Record button
⑦ Eject button
⑧ Radio dial scale
⑨ Built-in microphone
⑩ Tuning knob
⑪ Band selector
⑫ Volume control knob
⑬ Tone control knob
⑭ Radio/tape selector
⑮ Remote jack
⑯ External microphone jack
⑰ Auxiliary input jack
⑱ DC IN jack
⑲ Monitor switch
⑳ External speaker jack
㉑ Cord compartment cover
㉒ Battery cover
㉓ Earth jack
㉔ External antenna jack
㉕ Rod antenna

STANDARD VALUE TO TEST

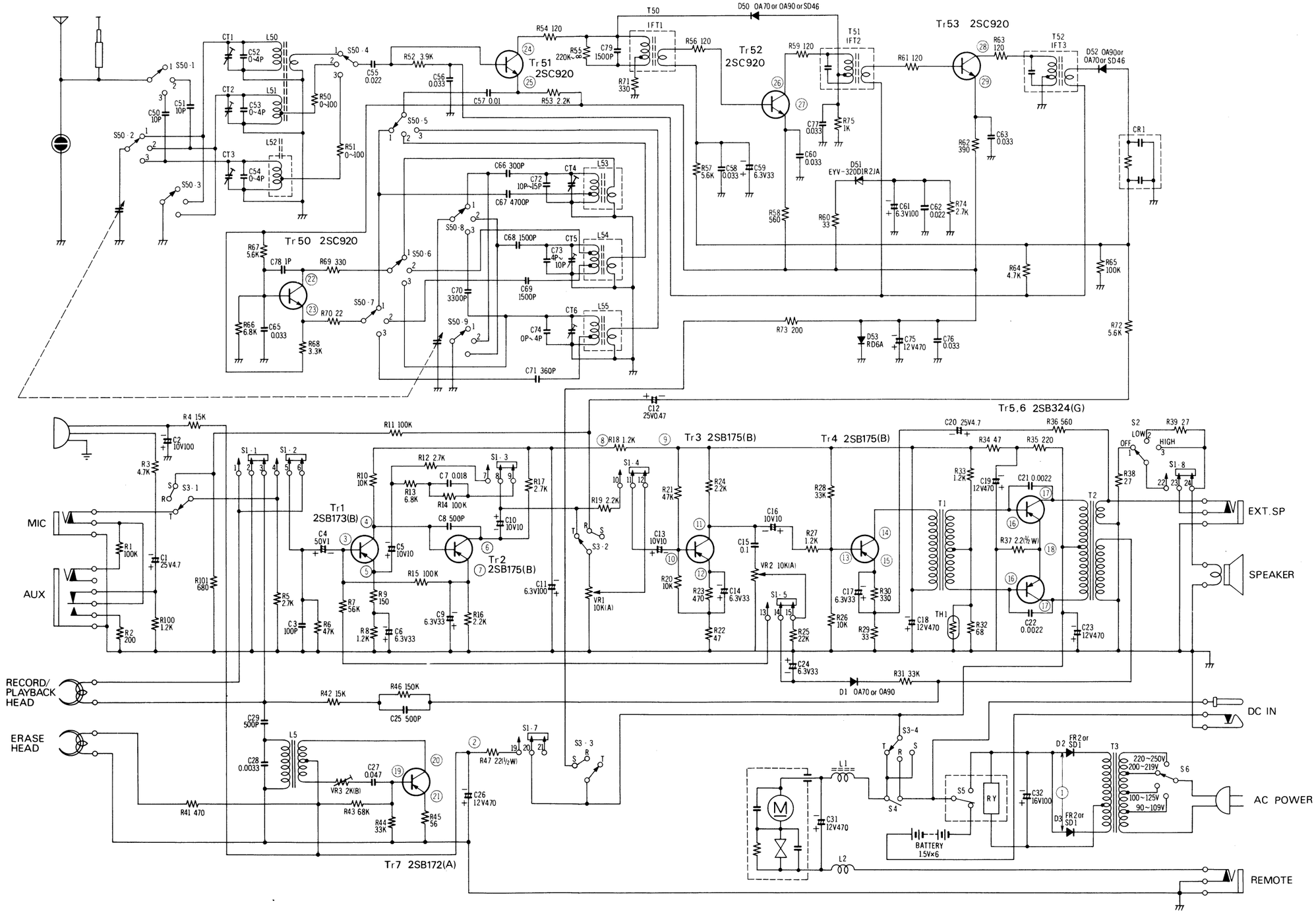
ITEM	VALUE	PARTS TO BE ADJUSTED	REMARKS
Recording bias current.	0.45±0.1 mA	VR3	Set the volume control to minimum.
Input level.	MIC −62±5 dB AUX IN −10±5 dB	——	To obtain 50±10μA of recording current through the recording head. Set the volume control to maximum.
Bias Oscillation frequency.	35±5 kHz	——	——
Erase current.	11±3 mA	——	——
Takeup tension.	65±15 gr-cm	——	——
Pressure of pressure roller.	500±50 gr	Pressure roller lever spring.	——

ELECTRICAL PARTS LOCATION





SCHEMATIC DIAGRAM MODEL RQ-434DS



STANDARD VOTLAGE CHART

Check Point	Recording	Playback	Radio	Check Point	Recording	Playback	Radio
①	−9 V	−9 V	−9 V	⑯	−0.15 V	−0.15 V	
②	−8.4 V	——	——	⑰	−8.9 V	−8.9 V	
③	−0.42 V	−0.6 V		⑱	−0.013 V	−0.013 V	
④	−2.2 V	−1.5 V		⑲	−0.95 V		
⑤	−0.3 V	−0.45 V		⑳	−8.4 V		
⑥	−2.3 V	−3.2 V		㉑	−0.7 V		
⑦	−2.03 V	−1.4 V		㉒			−3.3 V
⑧	−4.8 V	−4.9 V		㉓			−0.2 V
⑨	−6.1 V	−6.1 V		㉔			−0.2 V
⑩	−1.03 V	−1.05 V		㉕			−4.9 V
⑪	−2.5 V	−2.5 V		㉖			−1.4 V
⑫	−0.85 V	−0.87 V		㉗			−5.1 V
⑬	−1.28 V	−1.25 V		㉘			−0.2 V
⑭	−5.6 V	−5.6 V		㉙			−5.2 V
⑮	−1.0 V	−1.05 V					

NOTE:

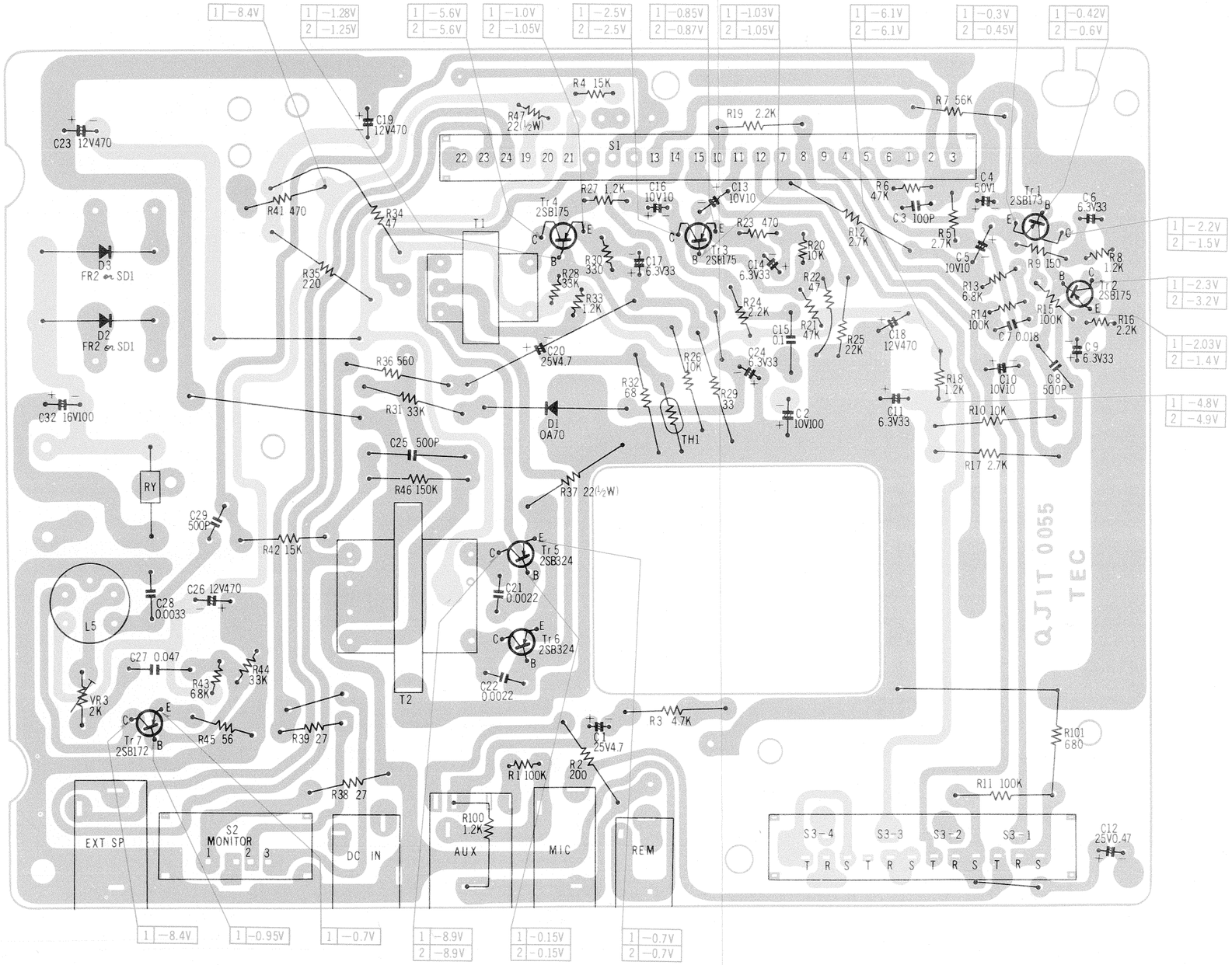
All measurements are under no signal condision with volume at minimum position.
Use VTVM for voltage measurement.

NOTE:

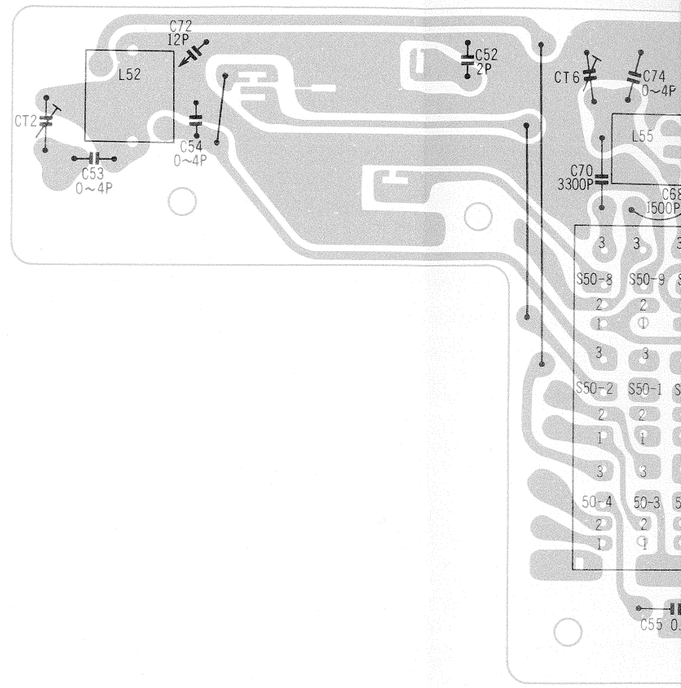
1. S1-1～S1-7..... Record/playback select switch (shown in playback position).
2. S2 ..... Monitor ON/OFF switch (shown in OFF position).
3. S3-1～S3-4..... Tape/Radio select switch (shown in tape position).
4. S4 ..... Power switch.
5. S5 ..... AC/DC select switch.
6. S6 ..... AC voltage select switch.
7. S50-1～S50-4 ... Band select switch (shown in MW position).
8. VR1 ..... Volume control.
9. VR2 ..... Tone control.
10. VR3 ..... Bias Oscillation adjustment VR.
11. Resistor are ohms (Ω), 1/4 watt unless specified otherwise.
    K=1,000Ω
12. Capacitors are microfarad (μF) unless specified otherwise.
    P=Micro-microfarad.
13. Encircled numbers (○) show the checkpoints for voltage.
    The values are marked in the standard voltage chart.

CIRCUIT BOARD

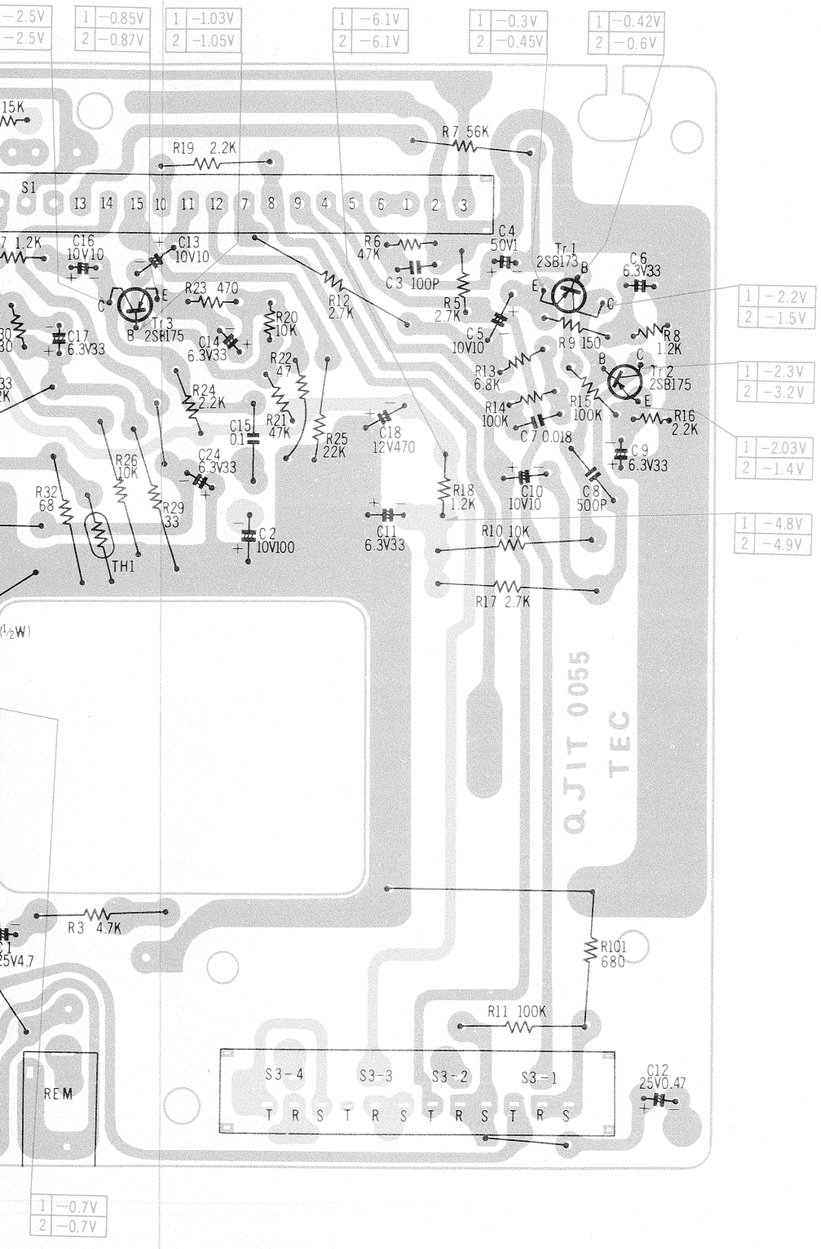
MAIN CIRCUIT BOARD

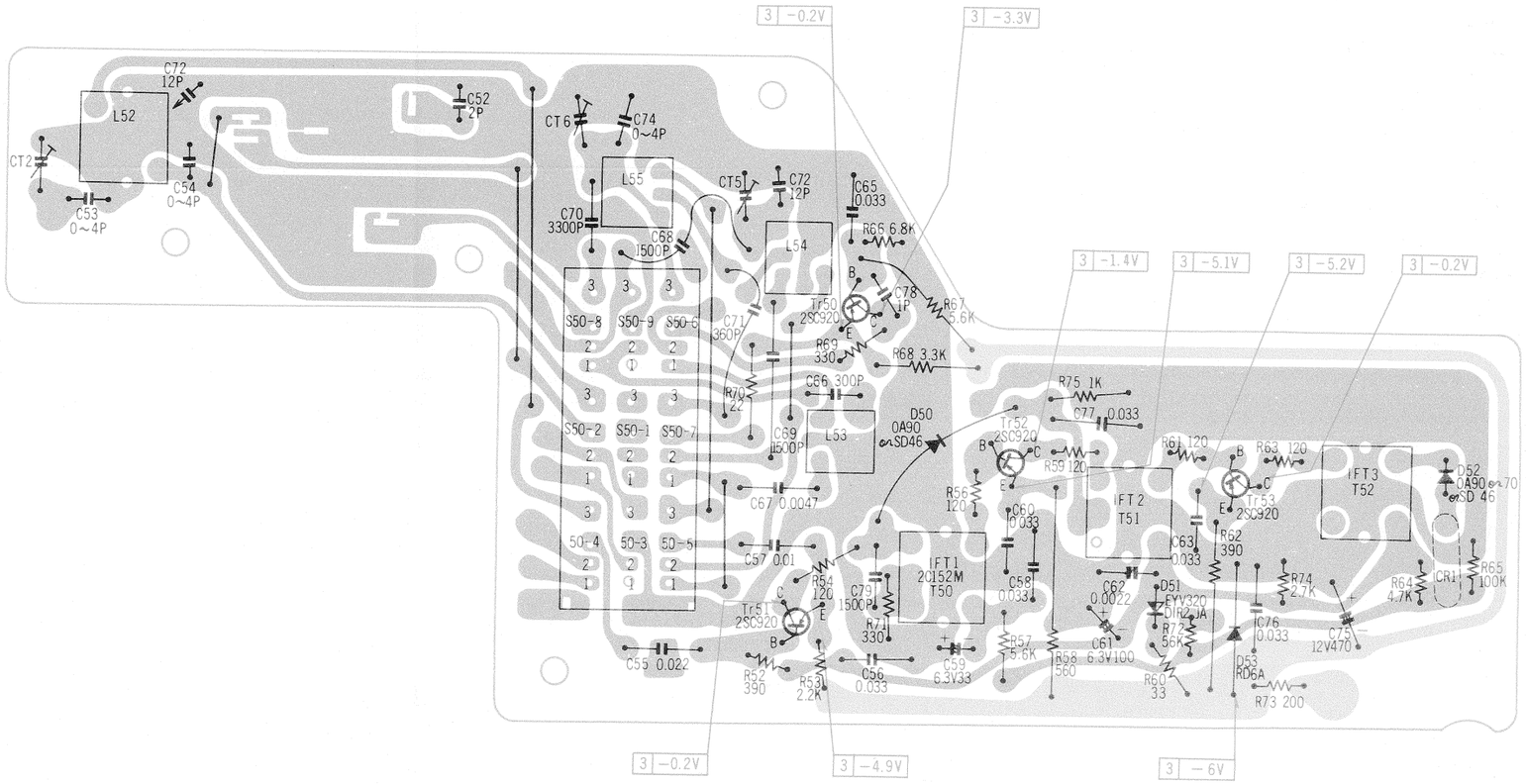


RADIO CIRCUIT BOARD



RADIO CIRCUIT BOARD

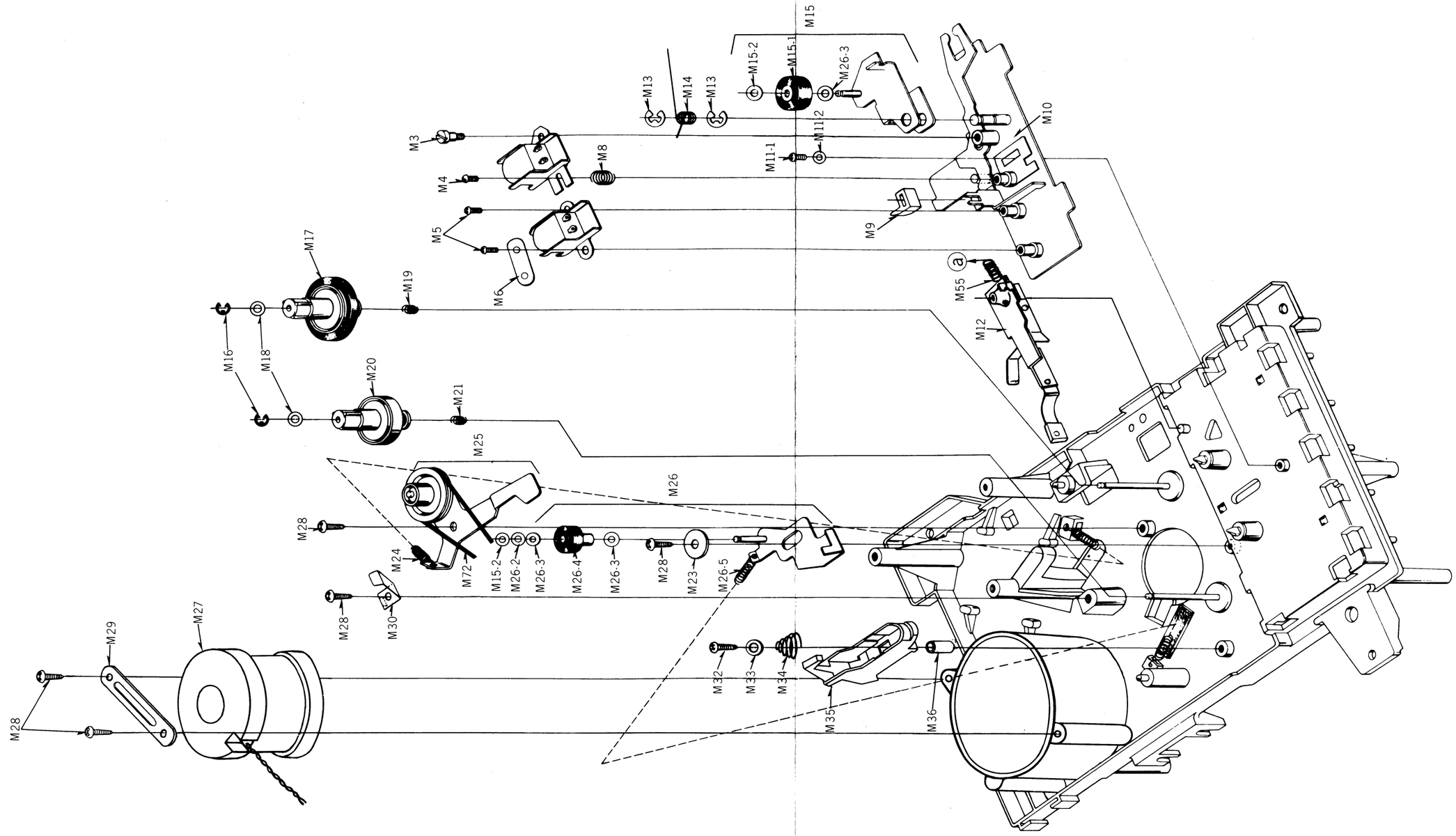


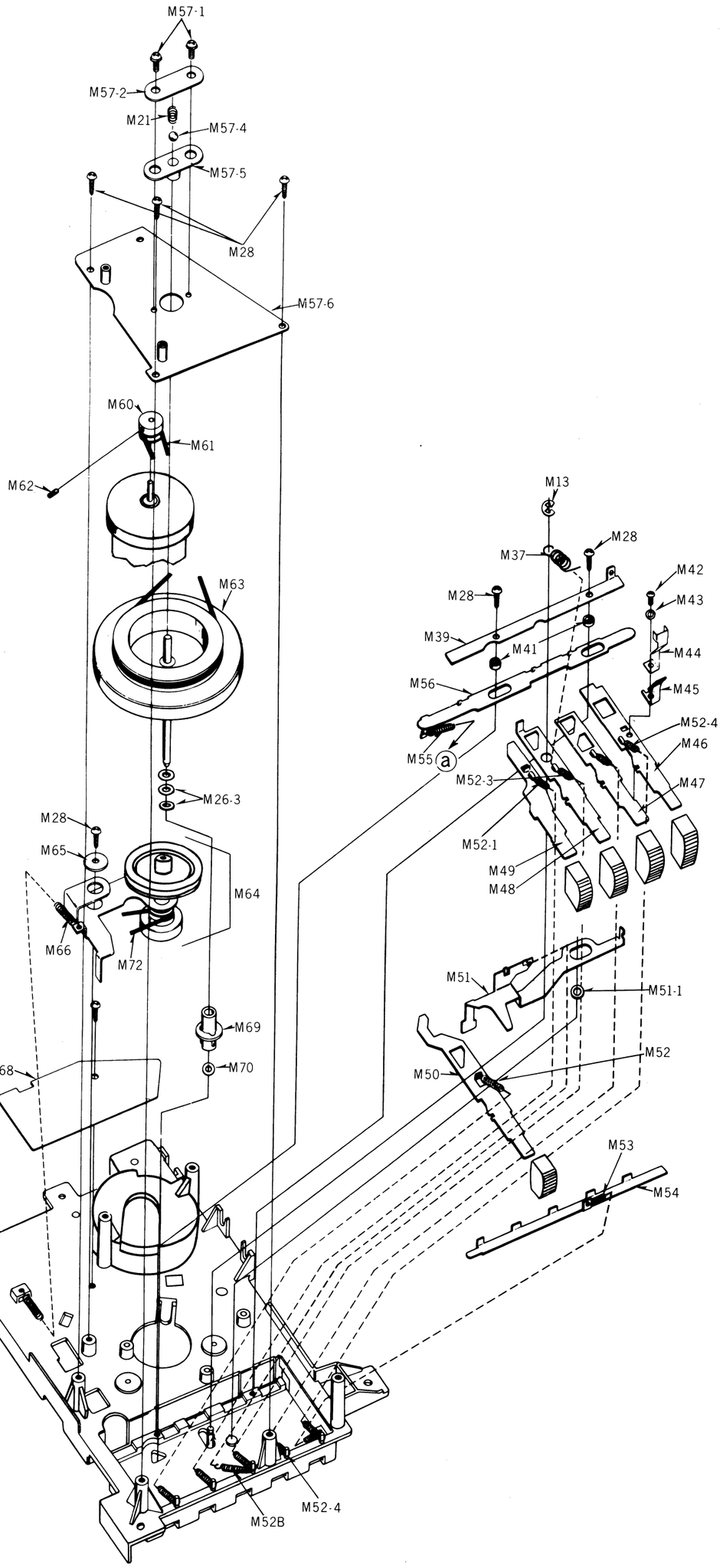


NOTE:

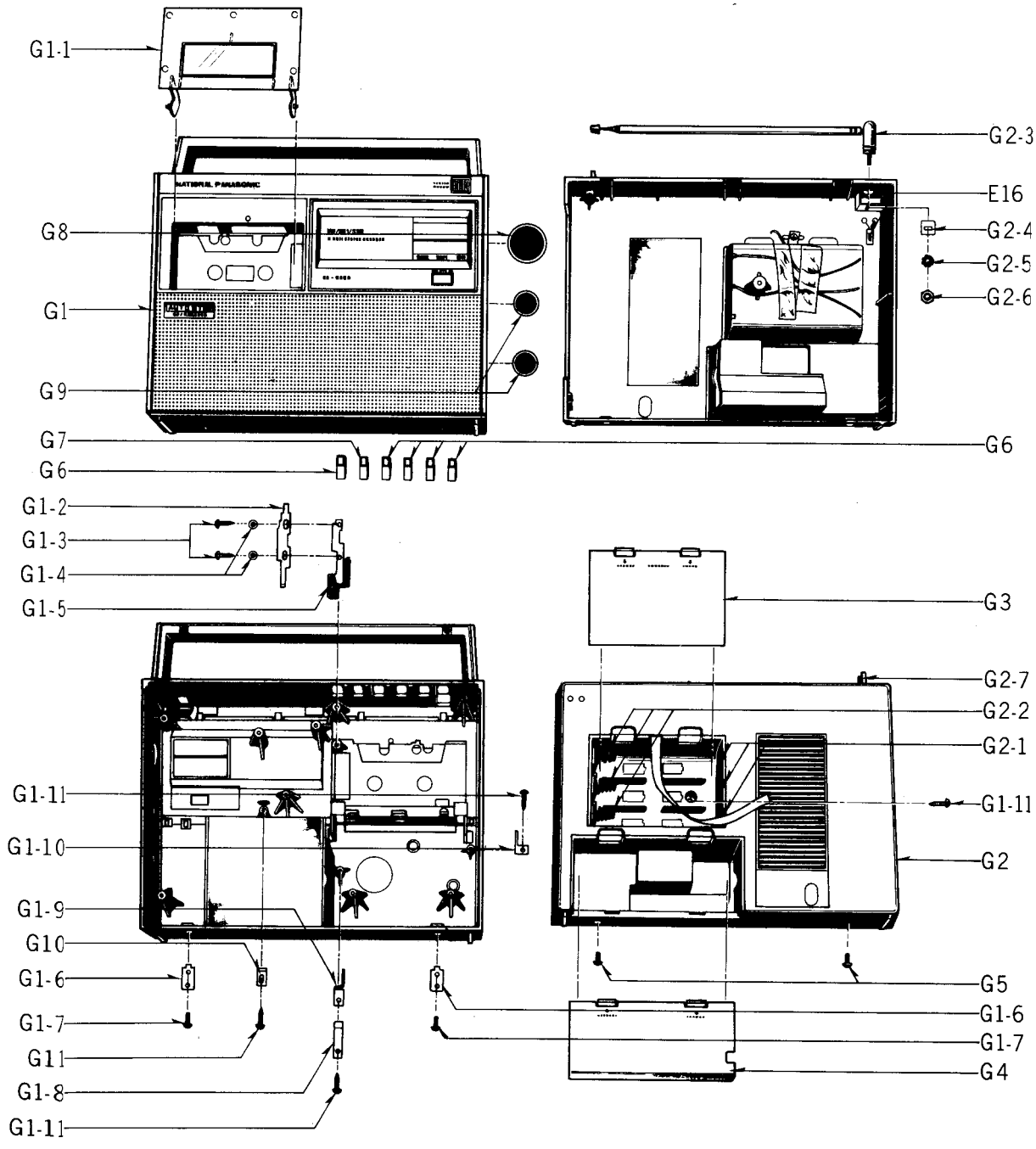
The circuit shown in red on the conductor is −B circuit.
Values indicated in ▭ are DC voltages between the chassis and electrical parts.
Numerals show values of voltage at .....
1...Recording, 2...Playback, 3...Radio.

EXPLODED VIEWS




M57-1
M57-2
M21
M57-4
M57-5
M28
M57-6
M60
M61
M62
M63
M26-3
M28
M65
M64
M66
M72
M69
M68
M70
M52B
M52-4
M13
M28
M37
M42
M28
M43
M39
M41
M44
M56
M45
M52-4
M55 (a)
M46
M52-3
M47
M52-1
M49
M48
M51
M51-1
M52
M50
M53
M54

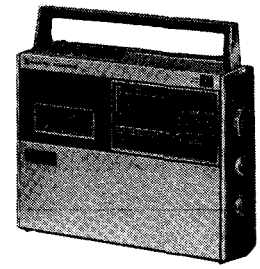
CABINET PARTS



REPLACEMENT PARTS LIST

MODEL RQ-434DS

NATIONAL PANASONIC



RQ-434DS

NOTE:

1. Be sure to make your orders of Replacement Parts according to this List.
2. "×" in "Rank" Column indicates that the part are not supplyable.
3. "**A**, **B** and **C**" in "Rank" Column indicates the recommended stock of replacement parts. Refer to the recommended stock table on last page.
4. "★" in "Remarks" Column indicates New Parts.
5. "(ISO)" in "Remarks" Column indicates ISO Screw or Nut.

NOTA:

1. Habrá que asegurarse que los pedidos de piezas de repuesto se hagan según esta lista.
2. "×" marcado en la columna "Rank", quiere decir que dichas piezas no pueden ser provistas.
3. "**A**, **B** y **C**" marcadas en la columna "Rank" indican el surtido que se recomienda tener de dichas piezas de repuesto.
4. "★" marcado en la columna "Remarks", quiere decir que las piezas son nuevas.
5. "(ISO)" marcado en la columna "Remarks", quiere decir que es un tornillo o tuerca "ISO".

NOTE:

1. Bien s'assurer de se conformer à la liste suivante pour les commandes de pièces de rechange.
2. "×", dans la colonne "Rank", indique qu'il n'est pas possible de fournir ces pièces.
3. "**A**, **B** et **C**", dans la colonne "Rank", indiquent le stock recommandé de pièces de rechange. Se reporter en dernière page au tableau des stocks/recommandés.
4. "★", dans la colonne "Remarks", indique les pièces nouvelles.
5. "(ISO)", dans la colonne "Remarks", indique une vis ou un écrou ISO.

HINWEIS:

1. Bestellen Sie Ihre Ersatzteile genau nach dieser Liste.
2. Mit "×" in der "Rank" Spalte aufgeführte Teile können nicht geliefert werden.
3. "**A**, **B** und **C**" in der "Rank" Spalte zeigt Ihnen den Vorrat der Ersatzteile an.
4. "★" in der "Remarks" Spalte bedeutet "neue Teile".
5. "(ISO)" in der "Remarks" Spalte bedeutet ISO-Schraube oder Mutter.

按:

1. 關於代用零件之訂購，務請依照此表而行之爲荷。
2. 「等級」(Rank) 一欄中之 "×" 標記表示該零件無從供應。
3. 「等級」(Rank) 一欄中之 "**A**, **B**, **C**" 標記表示該零件有存貨，值得介紹。
   請參照最後一頁的「值得介紹存貨表」。
4. 「備考」(Remarks) 一欄中之 "★" 形符號標記表示該零件爲新出品。
5. 「備考」(Remarks) 一欄中之 "(ISO)" 符號標記表示國際標準化機構 (ISO) 式螺絲或螺母。

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
		MECHANICAL PARTS					
B	M3	Head Holding Screw	QHQT0007	1			RQ-236S,435S, 435DS
B	M4	Head Adjust Screw ⊖2×7	XSM2−7	1			COMMON
B	M5	Screw ⊕2×4	XSM2+4	2			"
C	M6	Square Lug	QTDT0010	1			RQ-224S,232S, 236S,435DS
B	M8	Head Adjust Spring	QBCT0017	1			RQ-203S
A	M9	Plastic Detector	QBJT0057	1			RQ-224S,236S, 435DS
×	M10	Head Slide Plate Assembly	QXHT0002	1			"
C	M11-1	Screw ⊕2×6	XTM2+6	1			COMMON
C	M11-2	Steel Washer 2.2×8×0.5	QWQT0008	1			RQ-224S,236S, 435DS
B	M12	Brake Assembly	QXLT0019	1			"
C	M13	Stop Ring E3φ	XUC3FT	3			COMMON
B	M14	Pressure Roller Lever Spring	QBNT0003	1			RQ-224S,236S, 435DS
B	M15	Pressure Roller Lever Assembly	QXLT0017	1			"
B	M15-1	Pressure Roller Assembly	QXPT0001	1			"
C	M15-2	Snap Washer 2.6×6×0.5	QWQT0002	2			"
C	M16	Stop Ring E1.5φ	XUC15FT	2			COMMON
A	M17	Take-up Reel Table Assembly	QXPT0021	1			RQ-224S,236S, 435DS
C	M18	Tetoron Washer 2.2×4×0.15	QBKT7010	2			"
C	M19	Back Tension Spring-R	QBCT0005	1			"
A	M20	Supply Reel Table Assembly	QXPT0004	1			RQ-224S 232S, 236S,435DS
C	M21	Back Tension Spring-L	QBCT0010	2			RQ-224S,236S, 435DS
C	M23	Steel Washer	QWPT0011	1			RQ-224,435DS
C	M24	Take-up Lever Spring	QBTT0023	1			RQ-224S,236S, 435DS
B	M25	Take-up Pulley Lever Assembly	QXLT0021	1			RQ-224S
B	M26	Rewind Pulley Lever Assembly	QXLT0018	1			RQ-224S,236S, 435DS
B	M26-2	Fiber Washer 3.2×6×0.5	QBKT7006	1			RQ-224S,236S, 435DS
C	M26-3	Tetoron Washer 3.2×6×0.15	QWQT0004	5			"
B	M26-4	Rewind Pulley Assembly	QXPT0019	1			"

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	M26-5	Rewind Lever Spring	QBNT0004	1			RQ-224S,236S, 435DS
A	M27	Motor Assembly	QDMT0943	1			RQ-435S,435DS
C	M28	Screw ⊕2.6×8	XTM26+8	11			COMMON
×	M29	Motor Holding Plate	QMFT0015	1			RQ-224S,435S, 435DS
C	M30	Cassette Pressure Spring	QBPT0037	1			"
C	M32	Tapping Screw ⊕2.6×18	XTN26+18	1			COMMON
C	M33	Record Prevent Lever Washer	QWPT0008	1			"
C	M34	Record Prevent Lever Pressure Spring	QBCT0016	1			RQ-435S,435DS
C	M35	Record Prevent Lever	QMLT0075	1			"
C	M36	Record Prevent Lever Spacer	QMPT0024	1			"
C	M37	Slide Plate Lock Spring	QBCT0013	1			RQ-224S,236S, 435DS
C	M39	Push Angle	QMAT0013	1			★
C	M41	Lever Spacer	QMST0022	2			RQ-224S,236S, 435DS
C	M42	Screw ⊕2.6×4	XSM26+4	1			COMMON
C	M43	Lock Washer 2.6φ	XWC26BFQ	1			"
C	M44	Slide Switch Moving Plate	QMFT0013	1			RQ-224S,236S, 435DS
C	M45	Slide Switch Angle	QMAT0009	1			"
B	M46	Push Lever (Record)	QMLT0051	1			RQ-224S,236S, 435DS
B	M47	Push Lever (Rewind)	QMLT0052	1			"
B	M48	Push Lever (Relay)	QMLT0053	1			"
B	M49	Push Lever (Stop)	QMLT0054	1			"
B	M50	Push Lever (FF)	QMLT0055	1			"
B	M51	Auto Stop Lever	QMLT0065	1			RQ-224S,236S, 435DS
C	M51-1	Thrust Washer 5.1×12×0.2	QBKT7011	1			"
C	M52	Push Button Spring-A	QBCT0014	1			"
C	M52-1	Push Button Spring	QBCT0032	1			★
C	M52-2	Auto Stop Lever Spring	QBT1C72	1			RQ-224S,435S, 435DS
C	M52-3	Push Button Spring	QBCT0031	1			★
C	M52-4	Push Button Spring-B	QBCT0009	2			RQ-224S,236S, 435DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	M53	Lever Lock Spring	QBTT0025	1			RQ-224S,230S, 435DS
C	M54	Lock Lever	QMLT0064	1			"
C	M55	Clutch Lever Spring	QBT1064	1			RQ-224S,435DS
C	M56	Main Switch Lever	QMLT0067	1			RQ-224S,435DS
C	M57-1	Screw ⊕M3×6	XSM3+6S	2			COMMON ISO
C	M57-2	Flywheel Retainer	QMQT0005	1			RQ-224S,236S, 435DS
B	M57-4	Steel Ball 3/32"	QDK1002	1			"
C	M57-5	Flywheel Supporter	QMMT0010	1			"
×	M57-6	Flywheel Retainer Plate Assembly	QXKT0010	1			RQ-224S,236S, 435DS
B	M60	Motor Pulley	QDPT0031	1			RQ-435S,435DS
A	M61	Motor Belt	QDBT0009	1			RQ-224S,236S, 435DS
B	M62	Motor Pulley Screw	XXA26C4FX	1			"
A	M63	Flywheel Assembly	QXFT0003	1			"
B	M64	FF Lever Assembly	QXLT0016	1			RQ-224S,236S, 435DS
C	M65	FF Lever Washer	QWPT0004	1			"
C	M66	FF Lever Spring	QBTT0026	1			"
×	M68	Noise Prevent Plate	QTTT0111	1			"
C	M69	Capstan Metal	QMMT0009	1			"
C	M70	Snap Washer 2.4×6×0.5	QWQT0003	1			RQ-224S,236S, 435DS
A	M72	Take-up Belt	QDBT0008	1			"
		RESISTORS					
B	R1, 14, 15, 65	Carbon Resistor 100KΩ 1/4W	ERD14VK104	4			
B	R2	" 200Ω 1/4W	ERD14TK201	1			
B	R3	" 4.7KΩ 1/4W	ERD14TK472	1			
B	R4, 42	" 15KΩ 1/4W	ERD14VK153	2			
B	R5	" 2.7KΩ 1/4W	ERD14VK272	1			
B	R6 21	Carbon Resistor 47KΩ 1/4W	ERD14VK473	2			
B	R7	" 56KΩ 1/4W	ERD14VK563	1			
B	R8, 18, 27, 33, 100	" 1.2KΩ 1/4W	ERD14VK122	5			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
B	R9	Carbon Resistor 150Ω 1/4 W	ERD14VK150	1			
B	R10, 26	" 10KΩ 1/4 W	ERD14TK103	2			
B	R11	Carbon Resistor 100KΩ 1/4 W	ERD14TK104	1			
B	R12, 17	" 2.7KΩ 1/4 W	ERD14TK272	2			
B	R13, 66	" 6.8KΩ 1/4 W	ERD14VK682	2			
B	R16, 19, 24, 53	" 2.2KΩ 1/4 W	ERD14VK222	4			
B	R20	" 10KΩ 1/4 W	ERD14VK103	1			
B	R22	Carbon Resistor 47Ω 1/4 W	ERD14VK470	1			
B	R23, 41	" 470Ω 1/4 W	ERD14VK471	2			
B	R25	" 22KΩ 1/4 W	ERD14VK223	1			
B	R28, 44	" 33KΩ 1/4 W	ERD14VK333	2			
B	R30, 69, 71	" 330Ω 1/4 W	ERD14VK331	3			
B	R31	Carbon Resistor 33KΩ 1/4 W	ERD14TK333	1			
B	R32	" 68Ω 1/4 W	ERD14TK680	1			
B	R35	" 220Ω 1/4 W	ERD14TK221	1			
B	R36, 58	" 560Ω 1/4 W	ERD14TK561	2			
B	R37	Wire-wound Resistor 2.2Ω 1/2 W	ERW12L2R2	1			
B	R38	Carbon Resistor 27Ω 1/4 W	ERD14TK270	1			
B	R39	" 27Ω 1/4 W	ERD14VK270	1			
B	R43	" 68KΩ 1/4 W	ERD14VK683	1			
B	R45	" 56Ω 1/4 W	ERD14VK560	1			
B	R46	" 150KΩ 1/4 W	ERD14TK154	1			
B	R47	Carbon Resistor 22Ω 1/2 W	ERD12TK220	1			
B	R50, 51	" 100Ω 1/4 W	ERD14VK101	2			
B	R52	" 3.9KΩ 1/4 W	ERD14VK392	1			
B	R54, 56, 59, 61, 63	" 120Ω 1/4 W	ERD14VK121	5			
B	R55	" 220Ω 1/4 W	ERD14VK224	1			
B	R57, 67, 72	Carbon Resistor 5.6KΩ 1/4 W	ERD14VK562	3			
B	R60	" 33Ω 1/4 W	ERD14VK330	1			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
B	R62	Carbon Resistor 390Ω 1/4 W	ERD14TK391	1			
B	R64	" 4.7KΩ 1/4 W	ERD14VK472	1			
B	R68	" 3.3KΩ 1/4 W	ERD14VK332	1			
B	R70	Carbon Resistor 22Ω 1/4 W	ERD14VK220	1			
B	R73	" 200Ω 1/4 W	ERD14VK201	1			
B	R74	" 2.7KΩ 1/4 W	ERD14VK272	1			
B	R75	" 1KΩ 1/4 W	ERD14VK102	1			
B	R101	" 680Ω 1/4 W	ERD14VK681	1			
		VARIABLE RESISTORS					
A	VR1, 2	Variable Resistor 10KΩ (A)	EVHB0AL15A14	2			RQ-226S
A	VR3	Semi-fixed Variable Resistor 2KΩ (B)	EVLT0AA00B23	1			COMMON
		CAPACITORS					
B	C1	Electrolytic Capacitor 25 V 4.7μF	ECEA25V4R7	1			
B	C2	" 10 V 100μF	ECEA10V100	1			
C	C3	Styrol Capacitor 100 pF	ECQS1101M	1			
B	C4	Electrolytic Capacitor 50 V 1μF	ECEA50V1	1			
B	C5, 10, 13, 16	" 10 V 10μF	ECEA10V1	4			
B	C6, 9, 14, 17, 24, 59	Electrolytic Capacitor 6.3 V 33μF	ECEA6.3V33	6			
C	C7	Mylar Capacitor 0.018μF	ECQM05183M	1			
C	C8, 25, 29	Styrol Capacitor 500 pF	ECQS1501M	3			
B	C11, 61	Electrolytic Capacitor 6.3 V 100μF	ECEA6.3V100	2			
B	C12	" 25 V 0.47μF	ECEA25VR47	1			
C	C15	Mylar Capacitor 0.1μF	ECQM05103M	1			
B	C18, 19, 23, 26, 31, 75	Electrolytic Capacitor 12 V 470μF	ECEA12V470	6			
B	C20	" 25 V 47μF	ECEB25V4R7	1			
C	C21, 22	Mylar Capacitor 0.0022μF	ECQM05222M	1			
C	C27	" 0.0047μF	ECQM05473M	1			
C	C28	Mylar Capacitor 0.0033μF	ECQM05332M	1			
C	C32	" 16 V 100μF	ECEA16V100	1			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	C50, 51	Ceramic Capacitor 10 pF	ECCD1H100	1			
C	C52	" 2 pF	ECCD1H020	1			
C	C53, 54, 74	" 4 pF	ECCD1H040	1			
C	C55, 62	Ceramic Capacitor 0.022μF	ECKD1H223P	2			
C	C56,58,60,63, 65,76,77	" 0.033μF	ECKD1H333P	6			
C	C57	" 0.01μF	ECKD1H103MY	1			
C	C66	Styrol Capacitor 300 pF	ECQS1301J	1			
C	C67	Ceramic Capacitor 0.0047μF	ECCD2H472P	1			
C	C68, 69, 79	Styrol Capacitor 1500 pF	ECQS1152J	2			
C	C70	" 3300 pF	ECQS1332J	1			
C	C71	" 360 pF	ECQS1361J	1			
C	C72	Ceramic Capacitor 12 pF	ECCD1H120C	1			
C	C73	" 7 pF	ECCD1H070C	1			
C	C78	Ceramic Capacitor 1 pF	ECCD1H010C	1			
C	CT2, 5, 6	Trimmer Capacitor	ECV1ZW10P50	3			RQ-435DS
B		Variable Capacitor	PVC2J20T	1			"
		COMBINATION PARTS					
C	CR1	CR Combination	EXAF203Z471	1			RS-253S, 280S, 820S
		TRANSISTORS					
A	Tr1	Transistor	2SB173	1			COMMON
A	Tr2, 3, 4	"	2SB175	3			"
A	Tr5, 6	"	2SB324	2			"
A	Tr7	"	2SB172	1			"
A	Tr50, 51, 52, 53	"	2SC920	4			RQ-237S, 435DS
		DIODES					
A	D1	Diode	OA70 or OA90	1			COMMON
A	D2, 3	"	FR2 or SD1	2			RQ-226S, 224S
A	D50, 52	"	OA90 or SD46	2			COMMON RQ-435DS, 504S
B	D51	Varistor	EYV320DIR2JA	1			RQ-435S, 435DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
A	D53	Diode	RD6A	1			RQ-234S
		THERMISTOR					
A	TH1	Thermistor	QVM500A	1			COMMON
		TRANSFORMERS					
A	T1	Input Transformer	QLAT0101	1			RQ-204S,206S, 224S,236S
A	T2	Output Transformer	QLAT0303	1			RQ-226S,236S
A	T3	Power Transformer	QLPT0310	1			RQ-226S,435DS
A	T50	IFT1	RLI2C152M				RQ-435DS
A	T51	IFT2	QLIT0101	1			"
A	T52	IFT3	QLIT0102	1			RQ-435DS
		COILS					
B	L1	Noise Prevention Coil (C)	QLPT0002	1			RQ-230S,232S, 435DS
B	L2, 3, 4	Noise Prevention Coil (A)	QLP0114	3			RQ-224S,232S, 236S,435DS
A	L5	Oscillator Coil	QLBT0107	1			RQ-435S,435DS
B	L50, 51	Bar Antenna Coil	ELR12B5009	1			RQ-435DS
B	L52	Antenna Coil	QLRT0004	1			"
B	L53	Local Oscillator Coil (MW)	QLBT0306	1			RQ-435DS
B	L54	Local Oscillator Coil (SW1)	QLBT0307	1			"
B	L55	Local Oscillator Coil (SW2)	QLBT0308	1			"
		SWITHES					
A	S1	Slide Switch (Record/Playback Selector)	QSST0018	1			RQ-236S
A	S2	Slide Switch (Monitor)	QSST0034	1			★
A	S3	Slide Switch (Tape/Radio Selector)	QSST0033	1			★
A	S4	Leaf Switch (Motor ON/OFF)	QSBT0006	1			RQ-236S,435S, 435DS
	S5	Relay		(1)			
A	S6	Rotary Switch (AC Voltage Selector)	QSR0004B	1			RQ-435DS RS-253S,254S
A	S50	Slide Switch (MW/SW1/SW2 Selector)	QSST0031	1			RQ-435DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
		ELECTRICAL PARTS					
A	E1	Record/Playback Head	QWYT0103	1			★
A	E2	Erase Head	QWYT2102	1			RQ-204S,223S, 224S,435DS
B	E3	M3 Jack	QJAT0103	2			"
B	E4	M2 Jack	QJAT0102	1			"
B	E5	DC IN Jack	QJAT0105	1			RQ-204S,224S, 435DS
C	E6	Jack Conceal Panel (Plate)	QJQT0028	1			★
B	E7	Dial Dram Assembly	QXPT0034	1			★
B	E8	Dial Knob Shaft Assembly	QXMT0002	1			RQ-435S,435DS
C	E9	Heat Sink	QTHT0007	1			RQ-236S,435S, 435DS
A	E10	Relay With S5	QSK0114	1			RQ-226S,235S, 236S,435DS
B	E11	AC Cord	QFC1041	1			RQ-203S,232S, 236S,435DS
C	E12	Cord Bushing	QTD1126	1			"
A	E13	Speaker	EAS10P70S	1			★
B	E14	M3 Jack With SW	QJAT0110	1			★
A	E15	Condenser Microphone	EM24ATD	1			★
A	E16	Neon Lamp	QVL0301	1			COMMON
		CABINET PARTS					
B	G1	Body Case Assembly	QYBT0090	1			★
B	G1-1	Cassette Lid Assembly	QYAT0041	1			★
×	G1-2	Eject Metal	QKTT0066	1			★
C	G1-3	Tapping Screw ⊕3×10	XTM3+10	2			COMMON
C	G1-4	Metal Spacer	QMPT0021	2			★
×	G1-5	Eject Angle Uuit	QYQT0012	1			★
×	G1-6	Case Installation Metal	QKTT0068	2			★
C	G1-7	Screw ⊕3×6	XST3+6S	2			COMMON ISO
B	G1-8	Cassette-up Spring	QBPT0040	1			RQ-224S, 435S, 435DS
C	G1-9	Cassette Lid Holding Metal-L	QKTT0093	1			★

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	G1-10	Cassette Lid Holding Metal-R	QKTT0092	1			★
C	G1-11	Tapping Screw ⊕3×12	XTM3+12	3			COMMON
B	G2	Bottom Case Assembly	QYCT0068	1			★
C	G2-1	Battery Terminal	QJBT0031	3			RQ-430S
C	G2-2	Battery Terminal Spring	QJB0025	3			RQ-224S,226S, 435DS
C	G2-3	Rod Antenna	QSAT0001	1			★
×	G2-4	Antenna Instruction Metal	QKTT0084	1			★
C	G2-5	Lock Washer	XWG5F	1			★
C	G2-6	Nut	XNG5FXB	1			COMMON
C	G2-7	Antenna Retainer	QKQT0020	1			★
B	G3	Battery Cover Assembly	QYFT0058	1			★
B	G4	Cord Cover Assembly	QYFT0059	1			★
C	G5	Screw ⊕3×4	XSM3+4	2			COMMON
B	G6	Push Button-A Assembly	QXBT0003A	5			★
B	G7	Push Button-C Assembly	QXBT0003B	1			★
A	G8	Tuning Knob Assembly	QYTT0029	1			★
A	G9	Volume Knob Assembly	QYTT0028	2			★
C	G10	Speaker Holding Metal	QKT1154	1			★
C	G11	Screw ⊕3×8	XTM3+8	1			COMMON
C	G12	MIC Support	QBGT0033	1			★
		ACCESSORIES					
A	A1	Cassette Tape (Demonstration)	QFTITCCNRJZ	1			RQ-435S RQ-282S
A	A2	Earphone	EAE2SB1	1			COMMON
B	A3	Plug Adaptor	QJP0603S	1			" (ISO)
B	A4	Erase Plug	QJP0959	1			"
B	A5	Instruction Book	QQT1621	1			★
		PACKINGS					
C	P1	Inside Carton	QPNT0143	1			★
C	P2	Inner Cushion-L	QPNT0136	1			★
C	P3	Inner Cushion-R	QPNT0135	1			★

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	P4	Dust Cover	QFD0071	1			RQ-226S,435S
C	P5	Accessory Box	QPWT0016	1			RQ-435S

RECOMMENDED STOCK OF REPLACEMENT PARTS

Rank of Part	Estimated Selling Q'ty of Tape Recorder Set					
	Less than 50	100	300	500	1,000	2,000
A rank Parts	2	5	15	20	40	80
B rank Parts	1	2	5	10	20	40
C rank Parts	0	1	3	5	10	20